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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/992,666  
Filing Date: November 19, 2001  
Appellant(s): BLAIR ET AL.

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Peter Kraguljac  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed November 13, 2009 appealing from the Office action mailed February 19, 2009.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

Applicant Admitted Prior Art referencing US Publication (US 2003/0097469)

"Official Notice"

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### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA (Applicant Admitted Prior Art, referencing US Publication 2003/0097469).
3. As per claim 1, AAPA teach a method for configuring data communication paths between a central controller and a plurality of printing devices via a plurality of appliances, the method comprising:

one or more appliances (**data collection devices**) where an appliance is a computer remote from the central controller configured to collect diagnostic data from one or more of the plurality of printing devices (**paragraph [0002]**) and to transmit the diagnostic data to the central controller (**paragraphs [0004-0005]; data collection devices monitor and obtain diagnostic data from printers**);

for each of the printing devices, determining communication capabilities with the one or more appliances to determine communication paths between the plurality of printing devices and the one or more appliances (**paragraph [0004]; mapping information is obtained, each of the devices communications and is associated with at least one data collection device**);

transmitting signals indicative of the communication capabilities to the central controller **(paragraph [0003]);**

and

mapping respective communication paths between the central controller and the printing devices via the one or more appliances as a function of the communication capabilities to obtain an automatic appliance failover to allow diagnostic data to be collected from a selected printing device by way of multiple appliances **(paragraphs [0004]; each of the devices communicate with at least one data collector).**

AAPA fails to teach *ensuring that the appliances are active*. However, it would have been obvious to ensure that the devices are active prior to determining communications capabilities because doing so would allow for the mapping of devices to be properly obtained.

4. As per claim 4, AAPA teach:

for each of the printing devices, determining a second communication capability between a second appliance and the printing device; transmitting signals indicative of the second communication capabilities to the central controller; and wherein the mapping includes: mapping the respective communication paths between the central controller and the printing devices via the first and second appliances as a function of the first and second communication capabilities **(paragraphs [0003-0004]: mapping of devices is performed to identify how devices communicate with each other, each device communicates with at least one of the data collection devices).**

5. As per claim 5, AAPA teach the mapping includes: substantially balancing respective printing device loads across the appliances **(paragraph [0004]; load balancing).**

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6. Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA (Applicant Admitted Prior Art) in view of "Official Notice".

7. As per claim 20, AAPA teach a system comprising:

a plurality of printing devices (**paragraph [0002]**);

a plurality of appliances where an appliance is a computer configured to collect diagnostic data from one or more of the plurality of printing devices (**paragraph [0004]; data collection devices**);

a communication network configured to provide a plurality of communication path between components connected to the communication network (**paragraph [0003]; network**);

the plurality of printing devices and the plurality of appliances being connected to the communication network where communication paths are provided between one or more of the plurality of printing devices and one or more of the plurality of appliances (**paragraphs [0003-0004]**);

a controller remote from the appliances configured to communicate with the plurality of appliances and being configured to generate a map of the communication paths between the printing devices and the appliances based on signals received from the plurality of appliances;

the controller being configured to receive, from a first appliance from the plurality of appliances, diagnostic data relating to a selected printing device (**paragraphs [0003-0004]**).

AAPA teach a central controller that stores mapping information of how the devices on the network are connected to each other and that each of the devices communicate with at least one data collection device to collect diagnostic data that is sent to the central controller (**paragraphs [0003-0004]**). AAPA fails to teach that the

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controller performs an automatic appliance failover to a second appliance using the map of the communication paths if the first appliance is disabled in order to receive the diagnostic data relating to the selected printing device.

However, "Official Notice" is taken that the concept and advantage of automatic failover for devices is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to modify AAPA to include an automatic failover because doing so would allow for diagnostic data to be obtained from a different data collection device if a failure occurs at the first data collection device.

**The common knowledge or well-known in the art statement is taken to be admitted prior art because the traverse was inadequate. MPEP 2144.03c**

8. As per claim 21, AAPA teach automatically mapping the communication paths based on signals received from the plurality of appliances (**paragraph [0003]**).

9. As per claim 22, AAPA fails to teach *ensuring that the appliances are active*. However, it would have been obvious to ensure that the devices are active prior to determining communications capabilities because doing so would allow for the mapping of devices to be properly obtained.

10. As per claim 23, AAPA teach means for identifying addresses of the appliances and addresses of the printing devices with which the appliances are capable of communicating (**paragraph [0003]**).

11. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Basso et al (US Patent No. 6,370,119).

12. As per claim 2, AAPA teach the mapping of devices (**paragraphs [0003-0004]**) but fail to teach *identifying an optimal path between the appliance and the printing device*; and mapping the respective communication paths between the central controller

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and the printing devices as a *function of the optimal paths*. However, identifying optimal paths of a network is well known in the art as evidenced by Basso et al, who teach a method for determining the optimal path in a network between two nodes (**abstract, column 2, line 39-column 3, line 10**). It would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to combine AAPA and Basso et al because doing so would provide mapping that indicates optimal paths to printers in order to quickly and efficiently collect diagnostic data.

13. As per claim 3, AAPA-Basso et al teach the identifying includes at least one of:

determining one of a plurality of paths between a selected appliance and a selected printing device having a least number of hops; and determining one of a plurality of paths between the selected appliance and the selected printing device achieving a shortest communication time (**Basso et al: column 2, lines 44-50, abstract**).

#### **(10) Response to Argument**

As initial matter, it is noted that during patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification" (MPEP 2111) and "while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function" (MPEP 2114).

Argument A: *There is no teaching or suggestion of "for each printing devices, determining communication capabilities with the one or more appliances" or "to determine communication paths between the plurality communication devices*



*and the one or more appliances". No teaching or suggestion of a mapping operation that is performed "as a function of the communication capabilities".*

In response, the Examiner respectfully disagrees. AAPA teaches a monitoring process that surveys the network to identify all of the devices and, furthermore, the respective network addresses of the identified devices. Mapping is performed for identifying which of the devices are capable of communicating with each other and certain devices are designated as data collection devices. The data collection devices are chosen such that each of the devices in the network communicates with at least one of the data collection devices. Next, each of the devices is associated with one of the data collection devices **(see at least paragraphs [0003-0004])**. In review, AAPA determines the communications capabilities of each device and also the communication capabilities to the designated data collection devices and associates each device to the data collection devices. This clearly meets the claimed limitation of *"for each printing devices, determining communication capabilities with the one or more appliances"* and *"to determine communication paths between the plurality communication devices and the one or more appliances"*.

Argument B: *Signals indicative of the communication capabilities are not transmitted to a central controller but rather a "mapping" is transmitted from the human operator. AAPA fails to teach or suggest a mapping operation that is performed "as a function of the communication capabilities".*

In response, the Examiner respectfully disagrees. AAPA teaches a monitoring process surveys the network to identify all of the devices and the respective network addresses of the identified devices. Mapping is performed for identifying which of the devices are capable of communicating with each other and certain devices are

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designated as data collection devices, all based on device information obtained during the monitoring process.

Argument C: *The limitation "to obtain an automatic appliance failover to allow diagnostic data to be collected from a selected printing device by way of multiple appliances" is not taught.*

In response, the Examiner asserts that this limitation is merely a recitation of intended use. The claim is merely stating that the mapping step is done *to obtain an appliance failover to allow diagnostic data to be collected*. The claims do not positively recite any step directed to obtaining an automatic appliance failover. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Argument D: *Claim "As A Whole" is not obvious.*

In response, the Examiner respectfully disagrees. The claim as a whole is obvious. AAPA fails to teach *ensuring that the appliances are active*. However, it would have been obvious to ensure that the devices are active prior to determining communications capabilities because doing so would allow for the mapping of devices to be properly obtained. Ensuring activity of devices prior to starting a process that requires those devices is obvious and well known.

It is noted that KSR forecloses the argument that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. Under KSR, a claim would have been obvious if the claimed elements were known in the prior art and one skilled in

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the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention. Thus the claimed subject matter likely would have been obvious under KSR

Argument E: The Official Notice is improper and impermissible.

AAPA teach a central controller that stores mapping information of how the devices on the network are connected to each other and that each of the devices communicate with at least one data collection device to collect diagnostic data that is sent to the central controller. AAPA also teaches the concept of load balancing which is known as the transfer of duties or tasks from one device to another device in order to balance the load evenly among all devices **(see at least paragraphs [0003-0004])**. AAPA fails to teach that *the controller performs an automatic appliance failover to a second appliance using the map of the communication paths if the first appliance is disabled in order to receive the diagnostic data relating to the selected printing device*. However, "Official Notice" is taken that the concept and advantage of automatic failover for devices is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to modify AAPA to include an automatic failover because doing so would allow for diagnostic data to be obtained from a different data collection device if a failure occurs at the first data collection device. Therefore, AAPA in view of "Official Notice" meets the scope of the claimed limitations.

It is noted that the use of Official Notice has been judiciously applied and was used only to reject the well known limitation, which is merely automatic appliance failover. It is additionally noted that Applicant has not adequately traversed the Official Notice taken in any of the previous actions. " *To adequately traverse such a finding, an*

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applicant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art." MPEP 2144.03c. **Therefore the common knowledge or well-known in the art statement was taken and remains to be admitted prior art because the traverse was inadequate. MPEP 2144.03c**

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Ramsey Refai/

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/F. Ryan Zeender/

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